Azithromycin *v* oxytetracycline for the treatment of non-specific urethritis

EDITOR,—Single dose azithromycin 1 g rather than multidose tetracyclines or erythromycin over several days for the treatment of chlamydial infections is becoming more widespread as patient acceptability and improved compliance outweigh cost considerations. However, in men, treatment is often initiated on the basis of microscopic evidence of urethritis before the chlamydial result is available. Relatively few studies report the efficacy of azithromycin in the treatment of non-gonococcal non-chlamydial urethritis (NSU),[1–3] but recently published evidence based guidelines for the management of NSU recommend either doxycycline 100 mg twice daily for 7 days or azithromycin 1 g immediately.[4]

In this genitourinary medicine clinic azithromycin became first line treatment for all proved or suspected chlamydial infections from 1 April 1998. This retrospective study assessed the efficacy of azithromycin for the treatment of NSU compared with oxytetracycline 250 mg four times daily for 7 days, the previous first line treatment regimen for men with microscopic urethritis in whom no Gram negative diplococci were evident.

The outcome of all men with NSU diagnosed between 1 April 1998 and 30 September 1998 (treated with azithromycin) was compared with those diagnosed between 1 April 1997 and 30 September 1997 (treated with oxytetracycline).

NSU was defined as the presence of at least five polymorphonuclear leucocytes (PMNL) in five or more fields on microscopy of a urethral smear, negative culture of *Neisseria gonorrhoea* after direct plating onto modified New York culture medium and negative chlamydial screen on ELISA testing (Syva) of a urethral swab.

"Cure" was defined as either resolution of symptoms or clearing of previously positive two glass urine. A repeat urethral smear was not examined routinely.

"Treatment failure" was defined as persistent PMNL on microscopy of a urethral smear taken because of ongoing symptoms or persistent positive two glass urine test, with possibility of reinfection denied.

The results (see table 1) demonstrate that azithromycin is as effective as oxytetracycline in curing NSU, and produces fewer treatment failures, possibly owing to better compliance with single dose therapy. Compliance with multidose regimens might be expected to be less good in asymptomatic patients, but with no satisfactory "test of cure" this was difficult to ascertain. Overall, there was a 25% non-attendance rate for follow up, biased towards the asymptomatic patients and those treated with oxytetracycline.

Table 1 Comparative age, symptoms, and response to treatment of the two groups

	1997, oxytetracycline	*1998, azithromycin*
Number treated	76	52
Median age (range)	28 (18–63)	25 (16–54)
No with symptoms (%)	35 (46)	25 (48)
No cured (%)	29 (38)	27 (52)
No treatment failures (%)	6 (8)	0
Outcome uncertain*	41 (54)	25 (48)
Symptomatic dna	8/35 (23)	4/25 (16)
Asymptomatic dna	13/41 (32)	7/27 (26)

*Originally asymptomatic with clear two glass urine; did not reattend (dna); possibly reinfected.

The results of the two glass urine test did not differ significantly between the two groups but overall was positive in 70% of symptomatic patients compared with only 47% asymptomatic ($p<0.01$) Its low sensitivity and specificity[4] are likely to be even lower in asymptomatic patients. Default from follow up occurred more frequently in the asymptomatic patients, but was less evident in the azithromycin treated group, who had a lower default rate overall, as previously reported.[5]

In conclusion, although the numbers are small, it would appear that azithromycin is an effective treatment for NSU, and can be given at the time of initial diagnosis, pending the chlamydial result. Financial considerations preclude the use of azithromycin as first line treatment for NSU in many centres, but better compliance resulting in fewer treatment failures, and fewer wasted appointments from defaults may counter the economic argument.[5]

C THOMPSON
Fife Acute Hospitals NHS Trust, Victoria Hospital, Kirkaldy, Fife, KY2 5AH

1 Stamm WE, Hicks CB, Martin DH, *et al.* Azithromycin for empirical treatment of the nongonococcal urethritis syndrome in men. *JAMA* 1995;**274**:545–9.
2 Lister PJ, Balechandran T, Ridgway GL, *et al.* Comparison of azithromycin and doxycycline in the treatment of non-gonococcal urethritis in men. *J Antimicrob Chemother* 1993;**31**:Suppl E 185–92
3 Lauharanta J, Saarinen K, Mustonen M-T, *et al.* Single-dose oral azithromycin versus seven-day doxycycline in the treatment of non-gonococcal urethritis in males. *J Antimicrob Chemother* 1993;**31**:Suppl E 177–83
4 Horner P, Shahmanesh M. Management of non-gonococcal urethritis. *Sex Transm Inf* 1999;**75**(Suppl 1):S9-S12
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Accepted for publication 19 April 2000

Sexually transmitted infections in elderly people

EDITOR,—Jaleel *et al* recently presented the incidence of sexually transmitted infections and other conditions among elderly people attending a genitourinary medicine clinic.[1]

We, in our genitourinary medicine department at Royal Berkshire Hospital, Reading, studied the reasons for attendance of elderly people and compared them with the younger age group. Data were collected from patients aged 60 and above who attended the clinic between January 1998 and December 1998. Randomly selected sex matched people aged 20–35 years are taken for comparison.

A total of 68 elderly people attended the clinic. The mean age was 66.5 years (range 60–83); 61 (90%) were male and seven (10%) were female. Forty one (60%) attended for STI screening and 27 (40%) attended for non-STI management. In the younger age group 60 (88%) attended for STI screening and eight (12%) attended for non-STI management ($p<0.001$). Sixteen (24%) older attendees had an STI compared with 35 (51%) in the younger age group (see table 1). Of the 16 older attendees with suspected STIs 11(68%) waited over 2 weeks between symptom recognition and clinic attendance. Of 31 symptomatic attendees in the younger age group 10 (32%) waited over 2 weeks for symptom recognition and clinic attendance ($p<0.001$).

Table 1 Diagnoses of older and younger clinic attendees

	Older clinic	*Younger clinic*
	(No of patients)	
STIs		
NSU	7	21
Latent syphlis	3	
Genital herpes	2	1
Genital warts	1	11
Gonorrhoea	1	2
Trichomonas vaginalis	1	
HIV	1	
Other conditions		
Erectile dysfunction	15	1
Balanitis	9	1
Lichen sclerosus	1	
Zoon's balanitis	1	
Genital psoriasis	1	1
Genital ectopic sebaceous glands		1
Genital skin tag		1
Inguinal hernia		1
Genital sebaceous cyst		1
Miscellaneous (hepatitis B vaccination)		1

Many elderly people maintain heterosexual and homosexual activity. Therefore this age group is at a risk of all sexually transmitted infections.[2] In our study, a smaller percentage of older attendees had STIs compared with previous studies.[1 3] However, the number of older patients who attended for non-STI management are comparable. The delay between symptom recognition and healthcare presentation is a feature of STI related illness behaviour. The delay behaviour among individuals with suspected STIs is age specific, with longer latency periods experienced by people over the age of 50.[4] This finding was seen in our study as well.

NELSON DAVID
SASIKALA RAJAMANOHARAN
ALAN TANG
Department of GU Medicine, Royal Berkshire Hospital, Reading RG1 5AN

Correspondence to: Dr Nelson David

1 Jaleel H, Allan PS, Wade AAH. Sexually transmitted infections in elderly people. *Sex Transm Inf* 1999;**75**:449.
2 De Hertough DA. Sexually transmitted diseases in the elderly. *Infect Med* 1994;**11**:361–3.
3 Gott CM, Jushuf IM, Mckee KJ, *et al.* Characteristics of older patients attending genitourinary medicine clinics. *Health Care in Later Life* 1998;**3**:252–7.
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Accepted for publication 20 April 2000

Tertiary syphilis

EDITOR,—I read Dr Reed's letter on tertiary syphilis[1] with interest.

The regimen he describes for the treatment of early syphilis—arsenic, bismuth, and round the clock aqueous penicillin, was used in our hospital from 1946–8[2] although daily penicillin in beeswax was also used. It was unclear how much inactive penicillin K was in the commercial product used. The penicillin regimen used here was higher than in Lincoln (40 000–75 000 units 3–4 hourly). There were 10 treatment failures (?reinfections) out of 275 patients described.[2]

Treponema pallidum remains viable in the CSF even after adequate clinical treatment[3 4]

The old adage that we achieve clinical but not microbiological cure of syphilis with antibiotics is probably true.

It is likely that most people in developed countries nowadays who have untreated syphilis have received treponemicidal antibiotics for other intercurrent infections, so that any neurosyphilis that developed would either be modified[5] with few physical signs or would be completely treated and clinically cured. However, others disagree with this.[6]

But, to answer Dr Reed's question, we haven't seen anyone treated since the second world war who has developed neurosyphilis in subsequent years.

DAVID GOLDMEIER

1 Reed TAG. Tertiary syphilis. *Sex Transm Inf* 1999;**75**:75.
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5 Hooshmand H, Escobar MR, Kopf SW. Neurosyphilis—a study of 241 patients. *JAMA* 1972;**219**:726–9.
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BOOK REVIEWS

Infectious Diseases. By Donald Armstrong and Jonathan Cohen. Pp 2000; £250 (two volumes). London: Mosby, 1999. ISBN 0723 423288.

The most striking first impression of these two volumes is the lavish production with marvellous illustrations, photographs, and tables. It has many excellent features. The text is well set out and easy on the eye. The experience of the authors in approaching various diseases and clinical syndromes comes through strongly. The sections comprehensively cover infectious disease from basic science to clinical management. The clinical microbiology section is an important anchor and could be a short textbook in itself. I very much enjoyed the numerous practice points, which are oriented towards clinicians faced with funding solutions to problems. These consist of short essays with tables or illustrations and tackle particular clinical problems such as "the diagnosis of HIV in newborns," "what is the treatment of a positive toxoplasma titre in pregnancy?" or are in a debating style—for example, "how long should osteomyelitis be treated?"

Each section is colour coded and although the American numbering system takes a few minutes to get used to one can easily navigate around the book. The contributors are all internationally famous in their fields and, with so many of them, I am quite impressed by how up to date the book is. They must have been chased hard to get their contribution in on time. One of the few criticism would be that there could have been more on hepatitis C and its interaction with HIV.

However, if you can't find what you want in this book, there is a comprehensive list of websites, which are of interest to infectious disease and other physicians. There is a free CD ROM which creates a direct internet link to these sites. The other important resource is a slide library, which comes on the same CD ROM. In all, 1500 tables and clinical and other photographs are stored and can be made up into personalised presentations; these can then be used as a teaching resource via computer generated images. The high quality of these images will impress anyone involved in producing material for teaching. However, it is a shame some of the useful tables have not made it from the text to the CD ROM.

Although this book is expensive, I would recommend it to anyone interested in infectious diseases especially those who have to teach at any level, undergraduate or postgraduate.

With the rise of the internet the big textbook might soon be heading for extinction. Thankfully this book delays the time when I will be downloading information from the super highway rather than turning over the pages of a well produced book. If I need to use my computer there is always that free CD ROM.....

ANTON POZNIAK

St Stephen's Centre, Chelsea and Westminster Health Care Trust, Chelsea and Westminster Hospital, London SW10 9TH

Review of ABC of Sexual Health. Ed John Tomlinson. Pp 60; £14.95. London: BMJ Books, 1999. ISBN 0-7279-1373-5.

I was delighted when the editor sent me this book and asked me to review it. I had looked forward with anticipation to the original series that were published in the *BMJ*. I had thought then that each article was just superb and now they are all neatly packed together in this ABC, I am of the opinion that this is an excellent book which achieves its aim completely. On the cover, it says "it is an ideal reference for doctors, nurses, students and all those not involved in the area of sexual health," and Professor Adler adds in the foreword that this book will put the profession in touch with the real world, real people, with real problems, and fill a large gap in our knowledge.

John Tomlinson, the editor, has pulled together an excellent group of experts who have practical experience in the field and have managed to condense that experience into a series of short articles, all of which make informative, yet entertaining reading. In my opinion, no specific background is required to gain information from these articles and I have recommended specific sections of this book for individual patients who need to read about their problem.

Those of us who work in sexual medicine were amused that the *BMJ* had to carry a warning about the sexually explicit material inside and, indeed, John Tomlinson refers to this in the preface and admits that a very small number of readers were offended. However, given the general reticence in society about sexual matters, this is not surprising.

Sexual health is an essential part of having a happy and fulfilling life, and everyone who works in a caring profession should be comfortable when the conversation drifts into areas of sexuality. Patients, who often broach the topic with trepidation, need to be assured of a sensitive hearing. In my opinion, this excellent book will give anyone in the caring profession a good grounding in sexual matters, so that they can explore these areas with patients when appropriate, without embarrassment and have some idea of likely strategies of management.

COLM O'MAHONY

Countess of Chester Hospital NHS Trust, Chester CH2 1UL

NOTICES

International Herpes Alliance and International Herpes Management Forum
The International Herpes Alliance has introduced a website (www.herpesalliance.org) from which can be downloaded patient information leaflets. Its sister organisation the International Herpes Management Forum (website: www.IHMF.org) has launched new guidelines on the management of herpesvirus infections in pregnancy at the 9th International Congress on Infectious Disease (ICID) in Buenos Aires.

Pan-American Health Organization, regional office of the World Health Organization
A catalogue of publications is available online (www.paho.org). The monthly journal of PAHO, the Pan American Journal of Public Health, is also available (subscriptions: pubsvc@tsp.sheridan.com).

Imperial College School of Medicine, Division of Paediatrics, Obstetrics, and Gynaecology, Advanced Course for Obstetricians and Gynaecologists, 19–23 June 2000
Further details: Symposium Office, Imperial College School of Medicine, Queen Charlotte's and Chelsea Hospital, Goldhawk Road, London W6 0XG (tel: 020 8383 3904; fax: 020 8383 8555; email: sympreg@ic.ac.uk).

Australasian Sexual Health Conference, Ven Troppo, Carlton Hotel, Darwin, Northern Territory, 21–24 June 2000
Further details: Shirley Corley, Conference manager, Dart Associates, PO Box 781, Lane Cove, 2066 NSW, Australia (tel: 02 9418 9396/97; fax: 02 09418 9398; email: dartconv@mpx.com.au).

Imperial College School of Medicine, Division of Paediatrics, Obstetrics, and Gynaecology, Caring for Sexuality in Health and Illness (for healthcare professionals and nurses), jointly with Association of Psychosexual Nursing 27 June 2000
Further details: Symposium Office, Imperial College School of Medicine, Queen Charlotte's and Chelsea Hospital, Goldhawk Road, London W6 0XG (tel: 020 8383 3904; fax: 020 8383 8555; email: sympreg@ic.ac.uk).